

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 - 30 (cancelled)

Claim 31. (new) Process for the production of short cooking time rice comprising the steps of arranging hulled rice of at least 10% moisture content in bags, microwave heat treating said hulled rice in an apparatus comprising a microwave furnace having a tunnel, for 1 to 30 minutes, continuously by equal or interrupted by alternating microwave treatment, to reach a maximum temperature of 130°C, and said microwave heat treating step comprising treating said hulled rice with 0.05 to 4 W microwave power per gram hulled rice, and using microwaves of a frequency between 300 MHz and 10 GHz.

Claim 32. (new) Process according to claim 31, wherein said arranging step comprising arranging hulled rice of from 11 to 13% moisture content in said bags.

Claim 33. (new) Process according to claim 31, wherein said microwave heat treating step is carried out for 1 to 12 minutes.

Claim 34. (new) Process according to claim 31, wherein said microwave heat treating step is carried out for 3 to 5 minutes.

Claim 35. (new) Process according to claim 31, wherein said microwave heat treating step comprises treating said rice with 0.3 to 2.0 W microwave power per gram hulled rice.

Claim 36. (new) Process according to claim 31, wherein said microwave heat treating step comprises treating said rice with 0.25 W microwave power per gram hulled rice.

Claim 37. (new) Process according to claim 31, wherein said microwave heat treating step is performed with microwaves of a frequency of 2450 MHz.

Claim 38. (new) Process according to claim 31, wherein the microwave exposure is related to the mass unit of rice on steady or alternating capacity value (W/g).

Claim 39. (new) Process according to claim 31, wherein said arranging step comprises packing said hulled rice in polyethylene air-proof bags before the microwave treatment.

Claim 40. (new) Process according to claim 31, wherein said arranging step comprises packing said hulled rice in coated paper bags before the microwave treatment.

Claim 41. (new) Process according to claim 31, wherein said arranging step comprises packing in perforated bags used for ready cooking before microwave treatment.

Claim 42. (new) Process according to claim 41, wherein said packing step comprises packing said hulled rice in perforated polyethylene bags.

Claim 43. (new) Process according to claim 31, wherein said hulled rice is microwave treated by a 1 to 10 cm layer thickness.

Claim 44. (new) Process according to claim 31, wherein said hulled rice is microwave treated by a 3 to 7 cm layer thickness.

Claim 45. (new) Process according to claim 31, wherein said hulled rice is treated continuously by 1.5 W/g microwave radiation for 1 to 6 minutes.

Claim 46. (new) Process according to claim 45, wherein said hulled rice is treated continuously for 3 minutes.

Claim 47. (new) Process according to claim 31, wherein said hulled rice is treated in an interrupted way by 1.5 W/g microwave radiation for 1 to 6 times, for 0.5 to 2 minutes, and between treatments there are 5 to 30 seconds breaks.

Claim 48. (new) Process according to claim 47, wherein said hulled rice is treated in an interrupted way for three times and between treatments there are 10 second breaks.

Claim 49. (new) Process according to claim 31, wherein said hulled rice is treated by 0.75 W/g microwave radiation for 1 to 4 minutes, and then by 1.5 W/g microwave radiation for 1 to 5 minutes.

Claim 50. (new) Process according to claim 31, wherein said hulled rice is treated by 0.3 W/g microwave radiation for 10 to 16 minutes.

Claim 51. (new) Process according to claim 50, wherein said hulled rice is treated for 10 to 12 minutes.

Claim 52. (new) Process according to claim 31, wherein said hulled rice is packed in a number of perforated bags and staged one above the other and are moved by means of a conveyor through said tunnel provided in said microwave furnace, and further comprising generating in the tunnel a special wet atmosphere of 85 to 99°C in the surrounding of said rice bags.

Claim 53. (new) Process according to claim 52, wherein said special wet atmosphere has a temperature of from 90 to 95°C.

Claim 54. (new) Process according to claim 52, further comprising heating said hulled rice in the perforated bags to a temperature of 80 to 120°C.

Claim 55. (new) Process according to claim 54, wherein said hulled rice is at a temperature of from 105 to 108°C.

Claim 56. (new) Apparatus for the production of short cooking time rice comprising a microwave furnace, a tunnel in the microwave furnace, conveyor means for moving hulled rice packed into bags within the tunnel, said tunnel being provided with a top area element for collecting condensed water and steam, respectively, and the tunnel being provided with a bottom area element formed with apertures or with a perforation or with channels for distribution of any remaining condensed water and steam, respectively.

Claim 57. (new) Apparatus according to claim 56, wherein said tunnel is made from a material selected from the group consisting of ceramic material, plastic material, and quartz glass.

Claim 58. (new) Apparatus according to claim 56, wherein said top area element is formed in roof-like way and is angled or curved respectively semi-circular.

Claim 59. (new) Apparatus according to claim 56, wherein said top area element is provided with a means for collecting drops of condensed water or steam, respectively.

Claim 60. (new) Apparatus according to claim 56, wherein said top area element is provided with a cooling means for generating condensation.

Claim 61. (new) Apparatus according to claim 56, wherein a volume ratio of said tunnel and a volume of the rice packed in a number of bags is 3:1.

Claim 62. (new) Apparatus according to claim 56, wherein at least one of said tunnel and the microwave furnace is insulated to prevent heat losses.

Claim 63. (new) Apparatus according to claim 56, wherein said tunnel is equipped with an additional heating means.

Claim 64. (new) Apparatus according to claim 63, wherein said additional heating means comprises at least one heating element and/or hot air.

Claim 65. (new) Apparatus according to claim 56, wherein said tunnel is equipped with a channel system for heating medium for heating the tunnel.

Claim 66. (new) Apparatus according to claim 65, wherein said heating medium is hot air.

Claim 67. (new) Apparatus according to claim 56, wherein said microwave furnace is connected with a conduit means which is provided with a heat exchange means of a combustion engine which is connected with a generator provided for the generation of energy for the microwave furnace.

Claim 68. (new) Apparatus according to claim 67, wherein said conduit means is connected with a fan.

Claim 69. (new) Apparatus according to claim 67, wherein said conduit means is provided with a filter element.

Claim 70. (new) Apparatus according to claim 69, wherein a solar heat exchanger is used in lieu of said combustion engine.